

**AMENDMENTS TO THE CLAIMS**

Pursuant to 37 CFR §121(c), this listing of claims, including the text of the claims, will serve to replace all prior versions of the claims, in the application.

Please cancel claims 8-10, 14-16, and 20-23, and amend claims 7, 13, 19 and 24 as follows:

**Listing of Claims:**

Claims 1-6. (Cancelled)

1           7. (Currently Amended) A helical implant, comprising a core surrounded by helical threads,  
2 ~~said helical threads comprised of~~ with the inclined flanks of said threads bearing a continuum of  
3 micro-patterns increasing exposed surface area of said helical thread, the micro-patterns comprising  
4 one or more recesses and protrusions, and the micro-patterns having continuous and repeated arcuate  
5 cross-sectional outlines throughout the entire length of the micro-patterns.

Claims 8-10. (Cancelled)

1           11. (Previously Presented) The helical implant as set forth in claim 7, comprised of the  
2 micro-patterns comprising one or more recesses and protrusions with two adjacent recesses being  
3 separated by a distance on an order of 150  $\mu\text{m}$ .

Claim 12. (Cancelled)

1           13. (Currently Amended) A helical implant, comprising a core surrounded by helical threads  
2           bearing inclined flanks disformed with a continuum of micro-patterns increasing exposed surface  
3           area of said implant by extending along said flanks and around said core, with the micro-patterns  
4           comprising one or more recesses and protrusions, and each one of the recesses and protrusions  
5           having an identical arcuate cross-sectional outline throughout the entire length of the micro-patterns.

Claims 14-16. (Cancelled)

1           17. (Previously Presented) The helical implant as set forth in claim 13, comprised of the  
2           micro-patterns comprising one or more recesses and protrusions with two adjacent recesses being  
3           separated by a distance on an order of 150  $\mu\text{m}$ .

Claim 18. (Cancelled)

1           19. (Currently Amended) A helical implant, comprising:  
2           a cylindrical core;

3 a screw thread surrounding the cylindrical core, with the screw thread comprising crests,  
4 roots and flanks connecting the crests and the bottoms of the screw thread, and the flanks comprising  
5 inclined planes surrounding the cylindrical core; and

6 at least one micro-pattern formed on the flanks of the screw thread, and extending helically  
7 in a circumferential direction around the cylindrical core, with said micro-pattern comprising at least  
8 one groove and at least one ridge having identical arcuate outlines and opened at one side when  
9 viewed on any cross sectional plane of the screw thread, and said cross sectional plane containing  
10 the longitudinal axis of the cylindrical core.

Claims 20-23. (Cancelled)

1 24. (Currently Amended) The helical implant of claim ~~[[23]]~~ 19, comprised of the distance  
2 between the neighboring micro-patterns being 150  $\mu\text{m}$ .